FAN SHROUD WITH INTERNAL ASPIRATOR

Abstract of the Disclosure

A fan shroud is provided having upper and lower sections. The sections are designed to mateably engage one another at mating flanges so as to form an air passage between a fan and a cooling module of the vehicle. The upper section of shroud includes an aspirator portal in an upper surface thereof. An aspirator is provided having an air intake and an air outlet. The aspirator is supported in the lower section of the shroud proximal to the fan with the air outlet facing the fan. An engine intake air pre-cleaner unit having an air intake, an aspirator port, and an air exhaust is mounted to the shroud by aligning mounting tabs on the pre-cleaner with mounting bosses on the shroud so that the aspirator port is disposed in proximity to the aspirator portal in the upper section of shroud. One end of an aspirator hose is connected to the aspirator port of the pre-cleaner and passes through the aspirator portal. The other end of the aspirator hose is connected to the air intake of the aspirator. The aspirator hose passes generally through the middle of the shroud from the upper section to the lower section. The vacuum necessary for proper aspiration of the pre-cleaner is accomplished by air movement, induced by the fan, between the air intake of the pre-cleaner and the aspirator via the aspirator port and the aspirator hose. No additional hoses or fittings are required outside the shroud to provide aspiration to the pre-cleaner so that considerable space is conserved under the vehicle hood.